

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
3 February 2005 (03.02.2005)

PCT

(10) International Publication Number
WO 2005/010152 A3

(51) International Patent Classification⁷: **A61K 38/00**,
39/395, G01N 33/567

(21) International Application Number:
PCT/US2004/020296

(22) International Filing Date: 25 June 2004 (25.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/483,360 27 June 2003 (27.06.2003) US

(71) Applicant (for all designated States except US): **TANOX, INC.** [US/US]; 10301 Stella Link Road, Houston, TX 77025-5497 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **LI, Kang** [US/US]; 1719 Brightlake Way, Missouri City, TX 77459 (US). **WANG, Shen-Wu** [US/US]; 4711 Shiller Park Lane, Sugar Land, TX 77459 (US). **HU, Guanghui** [CN/US]; 1801 Butler Pike, #49, Conshohocken, PA 19428 (US). **YAO, Zhengbin** [US/US]; 5230 Weatherstone Circle, Sugar Land, TX 77479 (US).

(74) Agent: **LILJESTRAND, Cheryl, A.**; Tanox, Inc., 10301 Stella Link Road, Houston, TX 77025 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

(88) Date of publication of the international search report:
12 May 2005

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: **HUMAN MAST CELL-EXPRESSED MEMBRANE PROTEIN**

(57) Abstract: The present invention relates to GPR91, a purinergic receptor-like polypeptide, its expression in mast cells, and its use in the diagnosis and/or treatment of mast cell mediated diseases, including allergic and nonallergic asthma, chronic obstructive pulmonary disease (COPD), allergic rhinitis, anaphylaxis, allergic gastrointestinal disease, atopic dermatitis, rheumatoid arthritis, and other allergic, autoimmune and inflammatory diseases. The invention also includes methods of screening of agonists and/or antagonists of the GPR91 receptor.

WO 2005/010152 A3

10/562233

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
3 February 2005 (03.02.2005)

PCT

(10) International Publication Number
WO 2005/010152 A2

- (51) International Patent Classification⁷: C12N
- (21) International Application Number: PCT/US2004/020296
- (22) International Filing Date: 25 June 2004 (25.06.2004)
- (25) Filing Language: English
- (26) Publication Language: English
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- Published:**
— *without international search report and to be republished upon receipt of that report*
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WO 2005/010152 A2